

Date: Monday, 19/02/2007 2:56:57 PM
User: Linda Lacelle

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: 407 FWD X-TUBE
Job Number	: 30781		
Estimate Number	: 12348		
P.O. Number	: <i>N/A</i>	Part Number	: D407667105
This Issue	: 19/02/2007 S.O. No. : <i>N/A</i>	Drawing Number	: D407-667-145 REV B
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: <i>N/A</i> Type : LANDING GEAR	Drawing Revision	: B
Previous Run	: 26380	Material	: <i>N/A</i>
Written By	: <i>[Signature]</i>	Due Date	: 26/02/2007 Qty: 2 Um: Each
Checked & Approved By	: <i>[Signature]</i>		
Comment	: Est Rev:F 05.09.01 Add holes for compatibility with Bell Skidtubes KJ/JLM		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels as per PPP D206-667-105 CHG002

2.0	LANDING GEAR 1	LANDING GEAR RESOURCE 1
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Comment: LANDING GEAR RESOURCE 1

PULL FROM STOCK

1 X D407-667-105 B *19125* CHG001

1 X D407-667-105 B *19129* CHG001

RT 07-02-19

(2)

3.0	D407667105	FWD Crosstube
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Comment: Qty.: 1.0000 Each(s)/Unit Total: 2.0000 Each(s)

FWD Crosstube

4.0	D2856400	Abrasion Strip
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Comment: Qty.: 1.2138 f(s)/Unit Total: 2.4276 f(s)

Pick:

Qty	Part number	Description	Batch
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2	D2856-400(Cut to 6.94")	Abrasion Strip	
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N/A w/ sherd on tube

5.0	D2873043	Nut Plate Assembly
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Comment: Qty.: 2.0000 Each(s)/Unit Total: 4.0000 Each(s)

Pick:

Qty	Part number	Description	Batch
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 19/02/2007 2:56:57 PM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 407 FWD X-TUBE

Job Number: 30781

Part Number: D407667105

Job Number:



Seq. #:

Machine Or Operation:

Description :

2 D2873-043

Nut Plate 328387 85 07-02-20

6.0

D2873045

Nut Plate Assembly



Comment: Qty.: 2.0000 Each(s)/Unit Total: 4.0000 Each(s)

Pick:

Qty Part number Description Batch

2 D2873-045

Nut Plate

28695 85 07-02-20

7.0

D28911

Support 2.25 dia



Comment: Qty.: 2.0000 Each(s)/Unit Total: 4.0000 Each(s)

Pick:

Qty Part number Description Batch

2 D2891-1

Support

N/A

8.0

MS20601AD4W10

RIVET



Comment: Qty.: 14.0000 Each(s)/Unit Total: 28.0000 Each(s)

Pick:

Qty Part number Description Batch

14 MS20601AD4W10 Rivet

M102455 85 07-02-20

9.0

MS2192020

Clamp (per MIL-DTL-8783C)



Comment: Qty.: 4.0000 Each(s)/Unit Total: 8.0000 Each(s)

Pick:

Qty Part number Description Batch

4 MS21920-20

Clamp

N/A

10.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Install abrasion strips as per QSI 035 using DT8579. .Note: (3) top holes should be facing up.

2-Install supports and clamps as per Dwg D407--667-145. Torque clamps to 80-100 in lb

3-Install nut plates as per Dwg D407-667-145. Touch-up rivet heads with Imron paint.

N/A AD (2)
N/A AD (2)
85 07-02-20 (2)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 19/02/2007 2:56:57 PM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 407 FWD X-TUBE

Job Number: 30781

Part Number: D407667105

Job Number:



Seq. #:	Machine Or Operation:	Description :
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11.0	QC5	INSPECT WORK TO CURRENT STEP
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Comment: INSPECT WORK TO CURRENT STEP

DP

7-2-20

(2)

12.0	SPRAY PAINTING	SPRAY PAINTING
------	----------------	----------------



Comment: SPRAY PAINTING
REPAINT CUFFS

ml 07 02 20

(2)

13.0	QC14	Inspect Spray Paint
------	------	---------------------



Comment: Inspect Spray Paint

4T 07-02-21

(2)

14.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1
Pick Packing Kit

15.0	AN532A	Bolt
------	--------	------



Comment: Qty.: 4.0000 Each(s)/Unit Total: 8.0000 Each(s)
Bolt
Batch: M12307

16.0	MS21042L5	Nut
------	-----------	-----



Comment: Qty.: 4.0000 Each(s)/Unit Total: 8.0000 Each(s)
Nut
Batch: M10538-21

17.0	AN510A	Bolt
------	--------	------



Comment: Qty.: 10.0000 Each(s)/Unit Total: 20.0000 Each(s)
Batch: M102083

18.0	AN530A	BOLT
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Comment: Qty.: 4.0000 Each(s)/Unit Total: 8.0000 Each(s)
Pick: Packing Kit
Qty Part number Description Batch
M102083

[Signature]

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☐ No ☒ DQA: ☒ Date: 07/02/24

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 19/02/2007 2:56:57 PM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 407 FWD X-TUBE

Job Number: 30781

Part Number: D407667105

Job Number:



Seq. #:

Machine Or Operation:

Description:

4 AN5-30A

Bolt

19.0

AN960JD516

Washer



Comment: Qty.: 18.0000 Each(s)/Unit Total: 36.0000 Each(s)

Pick: Packing Kit

Qty Part number

Description Batch

18 AN960JD516

Washer

B19125

M10538-21

M1029

INSPECT 100% KITS

20.0

QC4



Comment: INSPECT 100% KITS FOR COMPLETENESS

21.0

PACKAGING 1

PACKAGING RESOURCE #



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D407-667-105

Location:

PPP Rev:

22.0

QC21



FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



Part #: D407667105
Batch #: B19125
Count: 18
OR: length X width
TAG #: 839
INITIAL: [Signature]
DART Inventory - 07.02.15

07/02/21
29
8X
M10292910X

07/02/21

07/02/21

07/02/21
u 07.02.21

L Lacelle

From: Brigitte Golden [bgolden@dartaero.com]
Sent: February 19, 2007 12:34 PM
To: Joyce Fobbs; hmenard@dartaero.com
Cc: Linda Lacelle
Subject: FW: Good to go (was hold for \$) PO# 8004386-CRFQ05241 for Out Fitter Aviation of Oregon
Attachments: 8004386.pdf

This PO will not be ready today.
Crosstubes D407-667-105 is CHG001 and customer required an OEM compatible.
Crosstube D407-667-205 is good.

Linda do you have a date for D407-667-105 OEM compatible?

Thank You

From: Joyce Fobbs [mailto:Joyce@darths.com]
Sent: February 19, 2007 9:48 AM
To: brigitteg; S Bedford; apanzuto@dartaero.com; Julie Lecocq
Cc: Holly Menard; HEATHERM@dartaero.com; Andrew Dockery; P McDonald
Subject: Good to go (was hold for \$) PO# 8004386-CRFQ05241 for Out Fitter Aviation of Oregon

Attached you will find PO# 8004386-CRFQ05241 for Out Fitter Aviation of Oregon.
Good to go. JF 19Fe0b7

Ship Date: Feb. 19, 2007

Note: DAS please advise DHS Freight cost for invoicing.

Thanks,

Joyce Fobbs

Administrative Assistant
DART Helicopter Services
Ph: (423) 538-5006
Fax: (423) 538-5031

19/02/2007

240 start



DESIGN PH	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED PH DS	APPROVED PH DS	DRAWING NO. D407-667-145	REV. B SHEET 1 OF 3
DATE 05.07.26		TITLE CROSSTUBE ASS'Y (407 HIGH FWD) NTS	
A	02.05.08	NEW ISSUE	
B	05.07.26	ADD HOLES AND NUT PLATES FOR COMPATABILITY WITH BHT/AA SKIDTUBES	

RELEASED
05-07-26

UNDER REVIEW
06-08-10
re-draw detail

Qty	Part Number	Description
X	D407-667-145	CROSSTUBE ASSEMBLY (407 HIGH FWD)
1	D6010-115	CROSSTUBE
2	D2856-400-694	ABRASION STRIP
2	D2873-043	NUT PLATE
2	D2873-045	NUT PLATE
2	D2891-1	SUPPORT
14	MS20601AD4W10	RIVET (OR NAS9302B-4-10)
4	MS21920-20	CLAMP

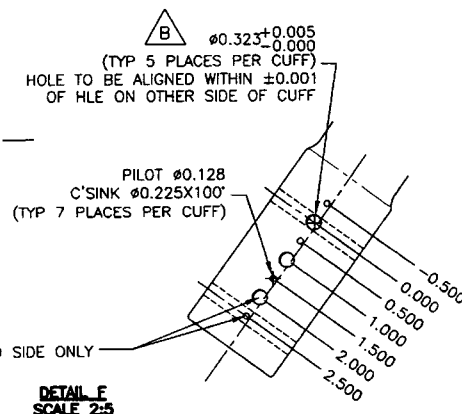
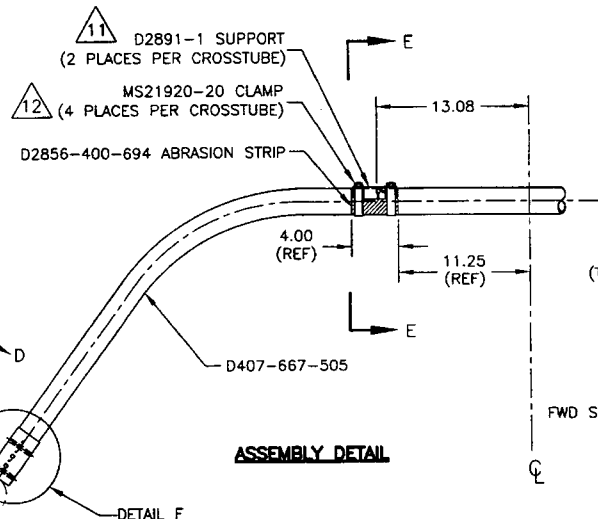
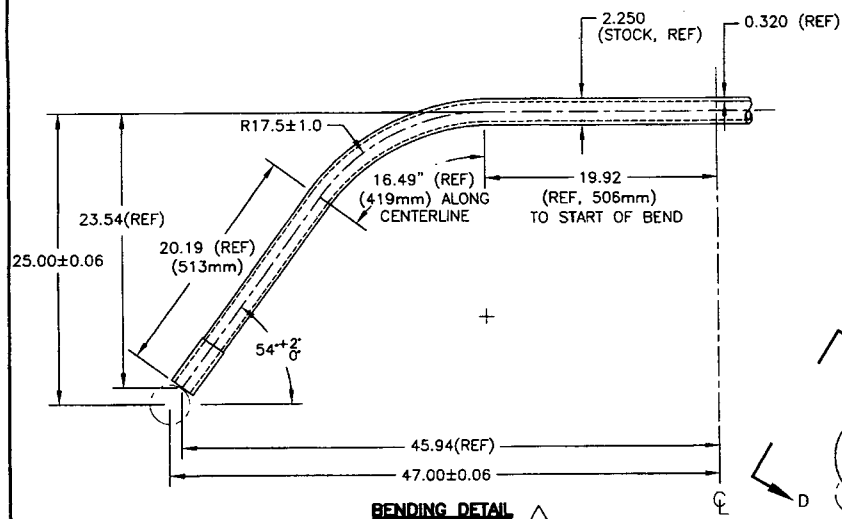
GENERAL NOTES:

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 2) MATERIAL: MANUFACTURED FROM D6010-115
FINISHED LENGTH = 113.20 ± 0.020
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2
- 4) PART IS SYMMETRIC ABOUT CENTERLINE.
- 5) RUN-OFF PART. BLEND OUT EDGE LONGITUDINALLY, TRANSITION SHOULD BE SMOOTH.
- 6) BEND PROGRESSIVELY WITH A MINIMUM OF 6 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D.
- 7) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- 8) SCRIBE DART PART NUMBER AND BATCH NUMBER IN THIS AREA WITH VIBRATING STYLUS.
- 9) INSTALL D2856-400-694 ABRASION STRIP WITH A 0.13 (REF) GAP ON BOTTOM SIDE OF CROSSTUBE, CENTERED OPPOSITE D2891-1 SUPPORT, PER QSI 035.
- 10) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 11) SEAL EDGES OF SUPPORTS AND ABRASION STRIP USING SIKAFLEX-241/291 SEALANT (OPTIONAL).
- 12) TORQUE CLAMPS 80 TO 100 IN-LB.

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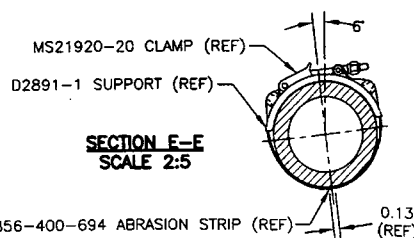
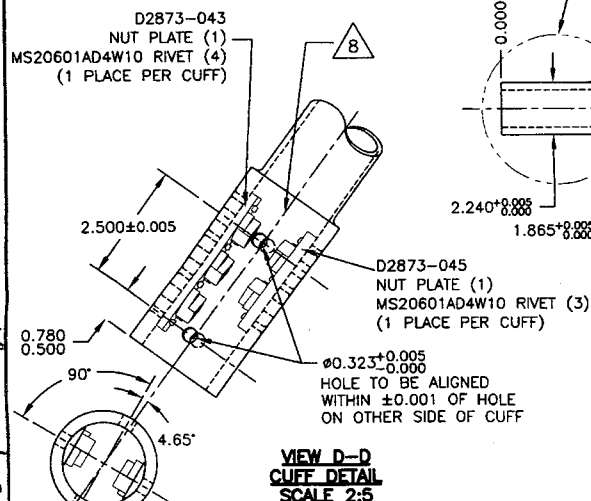
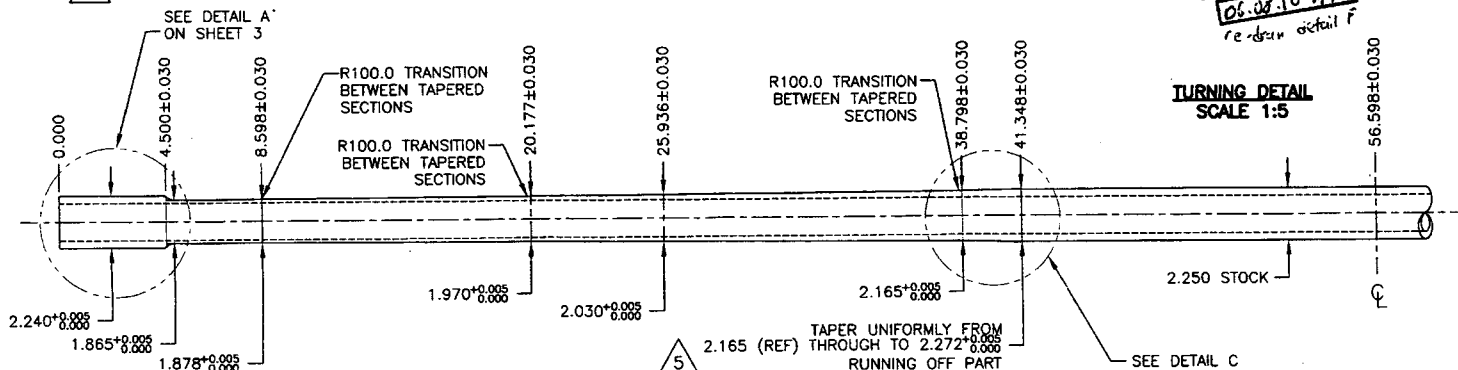
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C 20710219



UNDER REVIEW
05.07.10 BT
re-drawn detail F

TURNING DETAIL SCALE 1:5

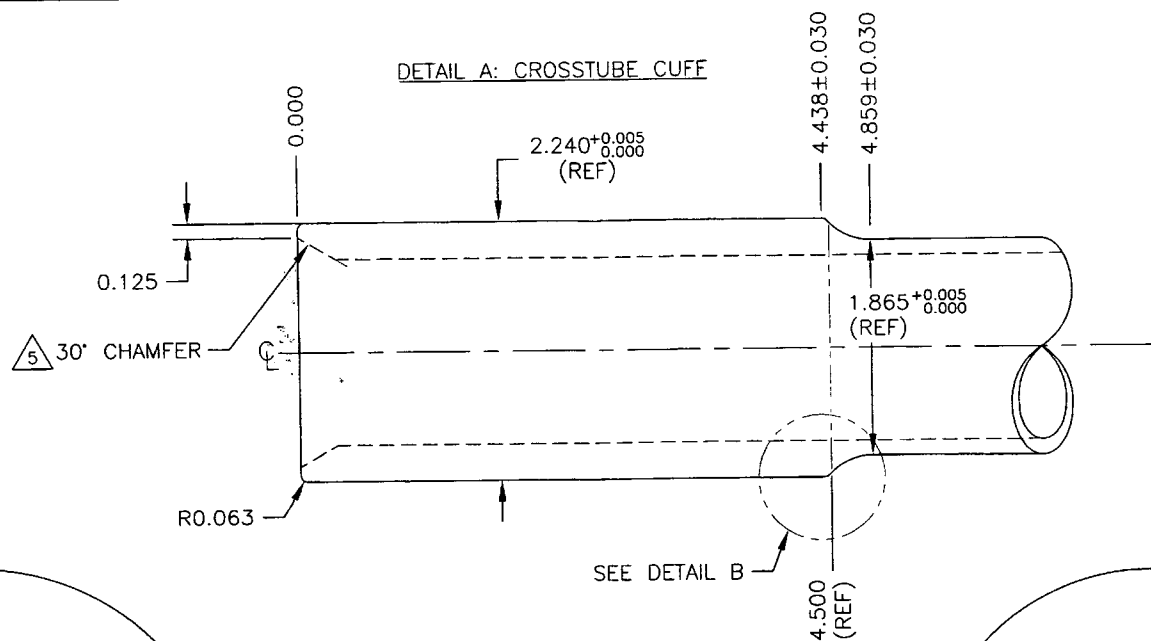


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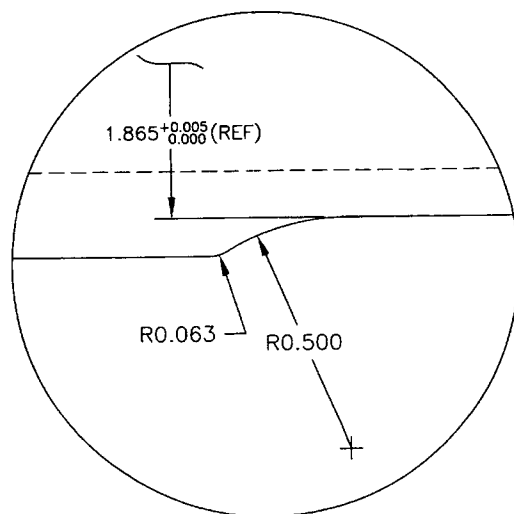
DESIGN	PH	DRAWN BY	PH	DART	DART AEROSPACE LTD.
CHECKED	DS	APPROVED	DS	DRAWING NO.	REV. B
DATE	05.07.26	TITLE	CROSSTUBE ASS'Y (407 HIGH FWD)	D407-667-145	SHEET 2 OF 3
		SCALE	1:10		

611/001028



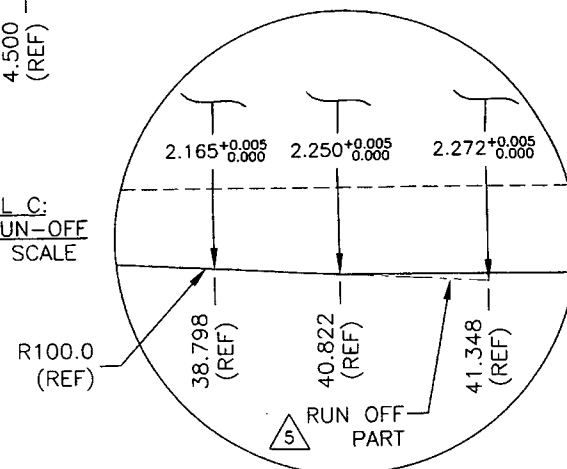
UNDER REVIEW
05-08-10 PH
Re-draw detail F

05-07-26



DETAIL B: CUFF
TRANSITION
SCALE 4:1

DETAIL C:
TAPER RUN-OFF
NOT TO SCALE



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DESIGN	PH	DRAWN BY	PH	DART	DART AEROSPACE LTD. HAMKESBURY, ONTARIO, CANADA
CHECKED	DS	APPROVED	DS	DRAWING NO.	REV. B
DATE	05.07.26	TITLE	CROSSTUBE ASS'Y (407 HIGH FWD)	SHEET 3 OF 3	SCALE

07/10/2019